

ABSTRACT

A ruggedized optical rearrangement device is provided. The device includes an input side having multiple separate flexible input light guide arrays, each of the arrays including multiple light guides. The device also includes an output side in which the light guides are repositioned to form multiple flexible output light guide arrays. A tube positioned between the input and output sides protects a transition region of the plurality of light guides. Adapters are positioned at each end of the tube, and at least one flexible strength element associated with the light guide arrays is connected to the adapters to prevent damage to the light guides. A method for ruggedizing an optical rearrangement device is also provided.